



**Forum: Metrology – Trade Facilitator  
Request for support**



**KENYA**

**Core Problem:**

- 1 Inadequate mass standards, lack modern mass comparators.
- 2 Inadequate working standards (mass, volume, length) and testing equipment for inspectors in the field to verify equipment.
- 3 Lack of sufficient equipment for the inspection of pre-packaged products by inspectors.
- 4 Laboratories are not environmentally controlled and lack some performance test facilities for type approval.
- 5 Lack of test equipment for utility meters (particularly water and electricity).
- 6 Metrology laboratories for the maintenance of national measurement standards lack versatile on-site calibration capability.
- 7 Nuclear technology measurements are not traceable and the use of radiochemistry and non-destructive testing is minimal.
- 8 Lack of equipment for residue analysis of materials and products (gas liquid chromatographs, high pressure liquid chromatographs).
- 9 Lack of recognition and capacity of the Kenya National Accreditation Services for testing and calibration laboratories, product and management systems and inspection bodies/personnel registration.

**Significance of the problem:**

- 1 Poor traceability of standards and lack of confidence in measurements, use of manual balances time consuming and costly, unreliable standards for use by inspectors.
- 2 All verification takes too long, and therefore much trade equipment remains unverified. This leads to loss of credibility, incorrect evaluation of dutiable products thus reducing government revenue, purchasers not getting value for money, thus increasing poverty, undervaluation of exported goods thus decreased national income, increased level of public complaints.
- 3 Commodity inspection does not meet R 87 and the quality of controls is poor. Inspections take too long. Under packed goods result in losses to the trader, consumer and government revenue and therefore inhibits sustainable development.
- 4 Instruments are placed on the market without sufficient testing, leading to lack of confidence in measurements, unfair trading, uncompetitive exports and incorrect evaluation of national income.
- 5 Unfair billing of consumers, who are then unable to pay for their basic needs.
- 6 High quality, traceable measurements are not available to industry, which requires this.
- 7 Incorrect dosage in the treatment of cancers. Inability to test radioactive residues in products for human consumption, thus threatening the health and safety of the public.
- 8 Inadequate conformity assessment testing affects exported products and thus national income. Inability to test imported products exposes the public to health and safety problems.
- 9 Lack of international recognition limits the scope of the quality assessment scheme to product and management system, personnel registration and calibration laboratories, which hampers trade with partners.

**What is needed:**

- 1 Electronic mass comparators for F2 weights, national mass standards of F2 and M1, mass laboratory computerisation, training.
- 2 F<sub>2</sub> and M<sub>1</sub> Mass working standards, truck with 500x200 kg roller weights, truck with reference meter and instrumentation, dispensing pump test measures, linear measures.
- 3 Pre-package inspection system: portable kit for inspectors, equipment for volume and density determination of solid, liquid and semi-solid products, training.
- 4 Performance test facilities.
- 5 Standard utility meter test equipment, technical regulations, training.
- 6 Three mobile calibration units with modules for volume/flow, mass, pressure, electricity, temperature, density, viscosity.
- 7 Establishment of a national dosimetry standards laboratory and the upgrading of the radiochemistry and non-destructive testing facilities.
- 8 Upgrading of existing facilities, development of chemical metrology and the production of certified reference materials.
- 9 Assistance in setting up Kenya's national accreditation scheme to enable it to enter into mutual recognition agreements.

**Contributions:**

In all cases, human resources can be provided. In addition, the following contributions can be made for specific items above:

- For item 1: Physical laboratory facilities;
- For item 4: Space for setting up type approval laboratory;
- For items 6, 8 and 9: Operational resources;
- For item 7: Physical facilities already exist for the proposed dosimetry, radiochemistry and non-destructive testing laboratories

**Whom to address:**

**During the Forum:**

Mr I. M. Ngatia  
Director of Weights and Measures



**After the Forum:**

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